

**REMARKS**

Applicants respectfully request entry of the foregoing amendments and reconsideration of the application in view of the amendments above and the remarks below. Claims 1 and 2 have been canceled and claims 3-20 have been added, such that claims 3-20 are currently pending in the application. Claims 3, 11, and 15 are independent claims. Applicants respectfully submit that no new matter has been added by way of the foregoing amendments to the claims or the written description.

Claims 1 and 2 have been canceled without prejudice or disclaimer to the subject matter therein, and without intending to dedicate any subject matter to the public. Accordingly, Applicants reserve the right to claim subject matter that might be considered similar to, related to, or covered by claims 1 and 2.

**Incorrect Filing Date Referenced in Office Action**

Applicants note that the Examiner appears to have inadvertently referenced an incorrect filing date on page two of the Office Action. More specifically, although the present application was filed on September 29, 2000 (as correctly referenced by the Examiner on the "Office Action Summary" page), the Examiner states in the first paragraph of page two that the examination is "based on applicant's disclosure filed on 29 September 2002." Additionally, with regard to the drawings, the Examiner has stated in the third paragraph on page two, presumably referring to the drawings filed with the application on September 29, 2000, that "[t]he informal drawings submitted on 28 September 2002 are acceptable for examination purposes only."

Applicants understand that these references to incorrect dates were likely inadvertent, and simply wish to clarify for the record that the filing date of the application, which includes the accompanying drawings, was September 29, 2000, as correctly reflected in the official Filing Receipt.

**Rejections Under 35 U.S.C. § 112 are Moot**

The Examiner rejected claims 1 and 2 under 35 U.S.C. 112, second paragraph. Applicants respectfully submit that this rejection has been rendered moot by way of the foregoing amendments, which canceled claims 1 and 2.

**Rejections Under 35 U.S.C. § 101 are Moot**

The Examiner rejected claims 1 and 2 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicants respectfully submit that this rejection has been rendered moot by way of the foregoing amendments, which canceled claims 1 and 2. Moreover, Applicants respectfully submit that newly added claims 3-20 are directed to statutory subject matter in accordance with 35 U.S.C. § 101.

**Rejections Under 35 U.S.C. § 102 and 103 are Moot**

Claims 1 and 2 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,266,053 to French et al. (hereinafter "*French*") in view of U.S. Patent No. 6,215,495 to Grantham et al. (hereinafter "*Grantham*"). Claims 2 was also rejected under 35 U.S.C. § 102(b) as being unpatentable over an article entitled, "V-Collide: Accelerated Collision Detection for VRML," by T. Hudson et al. (hereinafter "*Hudson*").

Applicants respectfully submit that these rejections have been rendered moot by way of the foregoing amendments, which canceled claims 1 and 2. Although claims 1 and 2 have been canceled, Applicants do not acquiesce to the Examiner's characterization of the present application or the cited references.

Moreover, Applicants respectfully submit that newly added claims 3-20 clearly define over *French*, *Grantham*, and *Hudson*, whether considered separately or in combination. For example, independent claim 3 recites a processor readable medium comprising code representing instructions to cause a processor to: analyze a first scene graph and a second scene graph, each scene graph having multiple interconnected nodes, and each second scene graph being associated with a corresponding scene; and associate, using a neutral scene graph, each node from the multiple interconnected nodes of the first scene graph with a node from the multiple interconnected nodes of the second scene graph independent of any connections between the multiple interconnected nodes of the first scene graph and any connections between the multiple interconnected nodes of the second scene graph. *French*, *Grantham*, and *Hudson*, whether considered separately or in combination, do not disclose, suggest, or render obvious the above recitations of claim 3.

Similarly, independent claim 11 recites a processor-readable medium comprising code representing instructions configured to cause a processor to: uniquely associate multiple real-world objects with multiple virtual representations of the real-world objects; determine if at least one contact state exists between a first virtual representation a second virtual representation, both from the multiple real-world objects; if at least one contact state exists, determine if the at least one contact state meets a predetermined threshold number of required contact states between the first virtual representation and the second virtual representation, each of the at least one contact state being associated with a corresponding portion of the first virtual representation and a portion of the second virtual representation; if the at least one contact state meets a predetermined threshold number of contact states, determine if a minimum drop angle parameter is exceeded for each portion of the first virtual representation associated with the at least one contact state; if the minimum drop angle parameter is exceeded, associate the second virtual representation with a grasp state; and if the minimum drop angle parameter is not exceeded, associate the second virtual representation with a release state. *French, Grantham, and Hudson*, whether considered separately or in combination, do not disclose, suggest, or render obvious the above recitations of claim 11.

Likewise, independent claim 15 recites a processor-readable medium comprising code representing instructions configured to cause a processor to: determine a first local surface approximation associated with a virtual representation of a first real-world object based on a position of a virtual representation of a second real-world object relative to a position of the virtual representation of the first real-world object; and output a signal configured to cause a haptic effect, the signal being output based on the first local surface approximation. *French, Grantham, and Hudson*, whether considered separately or in combination, do not disclose, suggest, or render obvious the above recitations of claim 15.

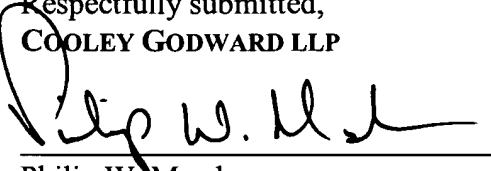
### **Conclusion**

All rejections having been addressed, Applicants respectfully submit that the present application is in condition for allowance, and earnestly solicits a Notice of Allowance, which is believed to be in order. Should the Examiner have any questions regarding this communication, or the application in general, he is invited to telephone the undersigned at 703-456-8108.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 50-1283.

Dated: September 20, 2004

Cooley Godward LLP  
ATTN: Patent Group  
One Freedom Square  
Reston Town Center  
11951 Freedom Drive  
Reston, VA 20190-5656  
Tel: (703) 456-8000  
Fax: (703) 456-8100

Respectfully submitted,  
COOLEY GODWARD LLP  
  
By: \_\_\_\_\_  
Philip W. Marsh  
Reg. No. 46,061